

## AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning on page 13, line 10 and ending on page 14 at line 24 with the following amended paragraph:

Referring now to FIG. 4, a stack of switchable elements according to an embodiment of the present invention is shown and indicated generally at 800. Stack 800 includes switchable elements, generally indicated at 750, 752, 754. While three elements 750, 752, 754 are shown, any number may be employed in stack 800. Elements 750, 752, 754 may each include a liquid crystal lens interposed between substrates 832, 834, 836, 838. Substrates 832, 834, 836, 838 are at least partially transparent to light 820, 830 transmitted through stack 800. Substrates 832, 834, 836, 838 may comprise glass, plastic, acrylic resin, polymer, crystal, thin films or other materials known to provide a structure for layered electro-optic devices. Substrates 832, 834, 836, 838 each have a first substrate surface and a second substrate surface 839 and 840, 842 and 844, 846 and 848, 850 and 852, respectively. At least a portion of substrate surfaces 839, 840, 842, 844, 846, 848, 850, 852 can include an antireflection coating as may be desirable for minimizing the loss of light 820, 830 transmitted through stack 800. At least a portion of substrate surfaces 840, 842, 844, 846, 848, 850 are deposited with a generally transparent electrical conductors such as indium tin oxide or conducting polymer. Deposited on the conductive substrate surfaces 840, 842, 844, 846, 848, 850 are lens function layers 860, 862, 864, 866, 868, 870. Lens function layers 860, 862, 864, 866, 868, 870 may consist of materials that may be patterned and include without limitation polymer, epoxy, polymer-dispersed liquid crystal, poly (methyl methacrylate) (PMMA) or photoresist. Lens function layers 860, 862, 864, 866, 868, 870 are at least partially transparent to light 820, 830 transmitted through stack 800. A portion of the lens function layers 860, 862, 864, 866, 868, 870 also are patterned such that the thickness, index of refraction, transmittance, scattering, absorption or other optical property of each layer spatially varies, and, in turn, may perform a phase, amplitude and/or ~~frequency~~ frequency modifying function on light transmitted through the layers. Lens function layers 860, 862, 864, 866, 868, 870 may be patterned using techniques that include without limitation as optical lithography, electron-beam lithography, UV light exposure, holographic, laser or other interferometry, or contact pattern transfer from a patterned substrate to a portion of the lens function layers. Preferably, lens function layers 860, 862, 864, 866, 868, 870 are patterned with a lens function including without limitation, the optical properties of lenses such as thin, thick, Fresnel, concave, convex, binary,

diffraction, aspheric, on-axis, off-axis, cylindrical, holographic and other lenses. Lens function layers 860, 862, 864, 866, 868, 870 may also include alignment grooves or additional alignment layers to provide a desired orientation or alignment of liquid crystal monomers. Lens function layers 860, 862, 864, 866, 868, 870 are preferably separated by spacers 880, 881, 882, 883, 884, 885. Spacers 880, 881, 882, 883, 884, 885 serve to provide cells 890, 892, 894 between adjacent pairs of layers 860, 862, 864, 866, 868, 870, and may comprise such materials as mylar, photoresist, glass fiber, glass or plastic spheres or other films or materials of generally uniform or controlled thickness. At least a portion of cells 890, 892, 894 are filled with liquid crystal fluid 900, 902, 904. Liquid crystal 900, 902, 904 may include without limitation one or more of a liquid crystal material, liquid crystal, doped liquid crystal, doped liquid crystal material, a nematic liquid crystal, a nematic liquid crystal material, a smectic liquid crystal, a smectic liquid crystal material, a ferroelectric liquid crystal, a ferroelectric liquid crystal material or a polymer dispersed liquid crystal material. Conductor surfaces 840, 842, 844, 846, 848, 850 are connected to control cables 910, 912, 914. Control cables 910, 912, 914 are connected to controller 772. Controller 772 provides voltage to control cables 910, 912, 914 and provides electric fields across pairs of conducting surfaces 840, 842, 844, 846, 848, 850 which control the molecular orientation of liquid crystal 900, 902, 904.